REMARKS

The Office Action mailed August 24, 2006 has been carefully reviewed and the following remarks are made in response thereto. Claims 1, 3-10, 15-32 and 34-71 are pending in the application and were last examined. In the Office Action, claims 1, 3-10, 15-32, 34, 51-53, 70 and 71 were rejected and claims 35-50 and 54-69 were objected to. Claims 1, 4, 9, 10, 15, 31, 32, 34, 51-53, 70 and 71 have been amended herein.

Rejection of Claims 1, 3 and 15-32 Under 35 U.S.C. § 101

Claims 1, 3 and 15-32 stand rejected as allegedly being directed to non-statutory subject matter. As suggested by the Examiner, claim 1 has been amended to recite "An isolated segment...". Applicants believe that this amendment obviates this rejection.

Rejection of Claims Under 35 U.S.C. § 102

Claims 1, 3-10, 15, 31-32, 34, 51-53 and 70-71 stand rejected as allegedly being anticipated by Stoneking et al. (Am. J. Hum. Genet. Vol 48, pages 370-380, 1991). The Examiner cites Stoneking as teaching polymorphic sites at positions 64, 73, 93, 195, 16111, and 16145. Applicants have amended the claims to remove these positions. The claims have also been amended to remove position 16362.

Claim Objections

Claims 35-50 and 54-69 are objected to as being dependent from a rejected claim.

Claims 35-50 depend from claim 10 and claims 54-69 depend from claim 9. As discussed above,

Applicants have amended claims 9 and 10 to remove positions 63, 73, 93, 195, 16111, 16145,

and 16362. In view of these amendments applicants respectfully request removal of this objection.

CONCLUSION

Having addressed all outstanding issues, Applicants respectfully request reconsideration and allowance of the case. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5768.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No.01-0431. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

January 24, 2007 /Sandra E. Wells/

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